Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

NY/NJ Metro Area, Hudson River, and South Long Island 2016 BIRDS Polygons

1.2. Summary description of the data:

This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, seabirds, passerine birds, and gulls and terns in the New York/New Jersey Metro Area, Hudson River, and South Long Island region. Vector polygons in this data set represent bird nesting, migratory staging, wintering sites, and general use areas. Species-specific abundance, seasonality, status, life history, and source information are stored in associated data tables (described below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for the the NY/NJ Metro Area, Hudson River, and South Long Island region. As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also the BIRDSPT (Bird Points) data layer for additional bird information.

1.3. Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

1.4. Actual or planned temporal coverage of the data:

2014 to 2016

1.5. Actual or planned geographic coverage of the data:

W: -74.595, E: -71.7215, N: 42.8226, S: 39.9993

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

- 1.8. If data are from a NOAA Observing System of Record, indicate name of system:
 - 1.8.1. If data are from another observing system, please specify:
- 2. Point of Contact for this Data Management Plan (author or maintainer)
 - 2.1. Name:

ESI Program Manager

2.2. Title:

Metadata Contact

- 2.3. Affiliation or facility:
- 2.4. E-mail address:

orr.esi@noaa.gov

2.5. Phone number:

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

ESI Program Manager

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly

accessible

(describe or provide URL of description):

Process Steps:

- 2015-11-01 00:00:00 - Step 1. Selecting species and data sources. Three main sources of data were used to depict bird distribution and seasonality for this data layer: 1) digital/tabular data sets provided by New York State Department of State (NYSDOS), New York State Department of Environmental Conservation (NYSDEC), Bureau of Ocean Energy Management, United States Fish and Wildlife Service (USFWS), Audubon NY, and NJ Audubon; 2) published and unpublished reports; and 3) expert knowledge from resource experts. Bird species are included in this atlas either because of their likelihood of direct or indirect impact by an oil spill or similar incident, their general rarity or imperilment, or their special protection status as threatened or endangered. Migratory or wintering concentration areas, nesting sites and colonies, and protected species are especially emphasized. - 2015-11-01 00:00:00 - Step 2. Mapping nesting locations and hotspots. Nesting locations for terns, gulls, cormorants, and herons along with breeding locations for piping plovers (state endangered and federally threatened) and other solitary nesting shorebird locations were mapped using digital polygon data obtained from NYSDEC, New York Natural Heritage Program (NY NHP), and NatureServe (NJ). Concentration values were generalized when presented for a range of dates (10-25, or 100s, 1000s, etc.) or left blank when not available. Migratory hotspot locations of terns and shorebirds were mapped using survey data provided by NY Audubon, NY NHP, and NatureServe (NJ). Concentration values, when presented, represent ranges or generalized values. Wading bird hotspot foraging locations and roost sites were mapped using survey data and expert knowledge provided by NJ Audubon and NY Audubon. Concentration values for wading bird foraging and roosting locations indicate high counts. In some instances, general distributions of sensitive species were mapped in association with habitat features using the NYSDOS Significant Coastal Fish and Wildlife Habitats narrative and accompanying digital polygon data.

- 2015-11-01 00:00:00 - Step 3. Special considerations in marshes. Salt and freshwater marshes are ranked as highly sensitive to oiling due to their biological productivity and the tendency for oil to persist based on low relative expose to wind/wave energy and the difficulties associated with human cleanup activities. Marshes are extremely valuable for a suite of bird species in the region including rails, bitterns, and marsh obligate passerines, and should be prioritized for protection wherever they exist. Due to the difficulties of surveying in these areas, and in an effort to highlight specific known nesting occurrences, we only mapped nesting locations from point count surveys (Hudson River region), NY NHP, NatureServe (NJ), and the NYSDOS Significant Coastal Fish and Wildlife Habitats narrative and associated polygon data. General distributions based on habitat associations were not mapped as they have been in the past. Therefore, an absence of a polygon in a region does not mean a species will not be present in the event of a spill. The majority of the Atlantic flyway population of Atlantic Brant and a

significant portion of American black ducks overwinter in the marshes fringing the large bays of New York and New Jersey. Particular consideration is given to these key species during region wide aerial surveys as is evident in the atlas data. - 2015-11-01 00:00:00 - Step 4. Waterfowl. Based on consultation with resource experts and due to the large geographic scale at which winter waterfowl surveys are conducted, we mapped winter waterfowl distributions to large waterbodies and adjacent marsh habitat. In an effort to reduce complexity and place an emphasis on the overall number of individuals utilizing a particular region, we chose to only map species that contained 100 or more individuals per survey area. Counts of species that did not meet this threshold within a surveyed area were aggregated together and displayed as wintering "waterfowl." This method reduces clutter on the map while still placing an emphasis on the regions providing critical overwintering waterfowl habitat. Smaller non-contiguous habitat within the survey area was noted as providing general distribution habitat to "waterfowl" during the winter season. Qualitative rather than quantitative terms were used to describe the concentration values of these areas. Additional areas providing critical foraging habitat and refuge areas for migrating waterfowl were mapped when data was available. The majority of the wintering and migratory occurrences were mapped using the USFWS Mid-winter Waterfowl Survey, data from NJ Audubon, and the NYSDOS Significant Coastal Fish and Wildlife Habitats narrative and associated polygon data. Nesting locations for resident waterfowl species were obtained from the NYSDEC Breeding Waterfowl Survey, the NY DOS Significant Coastal Fish and Wildlife Habitats narrative and associated polygon data, and some found opportunistically during other regional surveys. Similar to other marsh obligate nesting birds, the difficult nature of surveying in marsh habitat resulted in nesting waterfowl distributions in the area to be underrepresented within the atlas. Resident populations of waterfowl depend heavily on salt and freshwater marshes for breeding and therefore could be present within this habitat during the spring and summer breeding months.

- 2015-11-01 00:00:00 Step 5. Raptors. Nesting locations for bald eagles (NJ state endangered, NY state threatened), peregrine falcons (state endangered), osprey (NJ state threatened, NY state special concern), and northern harriers (NJ state endangered, NY state threatened) were mapped as points in New Jersey and polygons in New York at the request of the data providers; NatureServe (NJ) and NY NHP. Additionally, breeding locations of the state endangered short-eared owl were mapped as polygons along the southern shore of Long Island, NY. Wintering locations and migratory stopover concentrations were mapped as polygons where appropriate using the NY NHP data and the NYSDOS Significant Coastal Fish and Wildlife Habitats narrative and associated polygon data.
- 2015-11-01 00:00:00 Step 6. Seabirds. No pelagic seabirds nest within the AOI but certain species are predicted to use the offshore region depicted within the atlas. The general distributions of seabirds off of New York and New Jersey were mapped using models created by researchers at the National Centers for Coastal Ocean Science using the Compendium of Avian Information database. Predictive models of

seasonal occurrence were evaluated for inclusion on the map. Distributions were shown on the atlas when abundance was predicted to be higher than one individual per one kilometer pixel. These raster pixels were then converted to vector data and incorporated into coastal (0–1 nautical miles), nearshore (1-2 nautical miles), midshore (2-4 nautical miles) or offshore polygons (6-12 nautical miles from shore). Additional high concentration areas were added off of the coast of Long Island using information from the NY DOS Significant Coastal Fish and Wildlife Habitats narrative and associated polygon data and a study conducted by Loring and others 2014.

- 2015-11-01 00:00:00 Step 7. Special considerations for rare, threatened, and endangered species. Nesting location of rare, threatened or endangered passerines were included as polygons in this atlas even when hydrographically removed from large waterbodies in an effort to make this regional update more usable in an all hazards context. These data were obtained from the NY NHP and NatureServe (NJ) databases and concentration values were set to equal one pair unless otherwise noted in the original data.
- 2015-11-01 00:00:00 Step 8. Special considerations in creating the BIRDS feature class. The above digital and/or other sources were compiled by the project biologist to create the BIRDS data layer. Depending on the type of source data, two general approaches are used for compiling the data layer: 1) digital data layers are evaluated and used "as is" or integrated with the ESI base map features (ESIP, HYDROP, ESIL) 2) information gathered during initial interviews and from hardcopy sources are compiled and digitized using ESI base map features. See the Lineage section for additional information on the type of source data for this data layer. The ESI, biology, and human-use data are compiled into the standard ESI digital data format. A second set of interviews with participating resource experts are conducted to review the compiled data. If necessary, edits to the BIRDS data layer are made based on the recommendations of the resource experts and digital data are created.
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/51913

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data Documentation v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with

limitations, has a Waiver (Appendix A of Data Access directive) been filed?

- 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
- 7.2. Name of organization of facility providing data access:
 - 7.2.1. If data hosting service is needed, please indicate:
 - 7.2.2. URL of data access service, if known:

https://response.restoration.noaa.gov/esi_download

7.3. Data access methods or services offered:

Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).

- 7.4. Approximate delay between data collection and dissemination:
 - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2.** Data storage facility prior to being sent to an archive facility (if any): Office of Response and Restoration Seattle, WA
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or

deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.